



Lake Mead National Recreation Area Environmental Education

FIELD PROGRAM

Grade 2 **“Versatile Vegetation”**



A quarter-mile hike will introduce students to desert plants that are able to live in a harsh environment. They will discover plants that have fascinating adaptations.

THEME

Plants have a variety of adaptations that help them live in this harsh desert environment.

OBJECTIVES

Students will describe at least two desert conditions.
Students will compare ways in which they are similar to desert plants in dealing with desert conditions.
Students will compare and record at least three different plant adaptations.

VOCABULARY

adaptation - a physical or behavioral feature of an animal or plant that helps it survive in its environment

cactus - a plant with fleshy stems and branches and with scales or spines instead of leaves

desert - an area that receives less than 10 inches of rainfall per year and has a high rate of evaporation



BACKGROUND INFORMATION

Lake Mead National Recreation Area (NRA) is located in the Mojave Desert. The Mojave Desert is the hottest and driest of the North American Deserts, receiving an average yearly rainfall of four to six inches. The plants found in this arid region have specifically adapted to the harsh conditions of extreme heat, little or no rainfall, the drying effects of the wind, and intense sunlight.

There are many adaptations that can be easily seen on desert plants. They include, but are not limited to, very small leaves that help reduce the amount of surface area that is exposed to the intense sun, oily or waxy covering on leaves or pads to hold in moisture, light colored leaves or stems that reflect the sun's rays, expandable stems for storing water, and rounded shapes that help shade root systems.

BEFORE THE FIELD TRIP ACTIVITY

Have your students create their own journals to be used during their program at Lake Mead NRA. Journals provide a means of recording observations in the field and can be accessed at a later date for comparison studies. Before the field trip have students write the following words (each word on the top of a separate page): "water bottle", "sunscreen", "make shade", "white shirt". Please be sure that the students bring their journals on the day of the field trip.

AFTER THE FIELD TRIP ACTIVITY

Now that your students have had a field experience studying various desert plant adaptations, have them explore their school yard for one plant that shares an adaptation with a desert plant.

REFERENCES

MacMahon, James A. *Deserts*
Alfred A. Knopf, (1986)

Peterson, Carol, *Mojave Desert Discovery Guide*
National Park Service, (1994)



MAKING A DIFFERENCE! Your students can begin to make a difference wherever they live! Have your class come up with a project using the experience from their field trip to Lake Mead National Recreation Area to show others that they care about our desert community.



Teachers! - check out our new web site with an extensive classroom section:
<http://www.nps.gov/lame/classroom>